

# Oroville Facilities Relicensing

Federal Energy Regulatory Commission, Project No. 2100



**Engineering and Operations Resources**  
**Work Group**

**Study Plans**  
**(DRAFT)**



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## **Oroville Facilities Relicensing**

**Study Plan No. E4**

# **Flood Management Study**

**Changes since November 16, 2001**



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## **Oroville Facilities Relicensing**

### **Study E4: Flood Management-changes since 11/16/01**

## **Title Change: Flood Management Study**

### **Introduction/Background**

- Introduction and back ground separated.
- More detail information in the background.
- Standard project flood
- The Probable Maximum Flood (PMF)
- Flood Control Space and Release requirements.



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## Oroville Facilities Relicensing

### *Study E4: Flood Management-changes since 11/16/01*

#### Study Goal(s) and Objective(s)

- More detailed goals.
- More emphasis on documentation of current information such as license requirements etc.



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## Oroville Facilities Relicensing

### *Study E4: Flood Management-changes since 11/16/01*

#### Relationship to Relicensing Project Process

- No major change.

#### •Purpose and Need for the Study

- Editorial changes, and rearranging for clarity



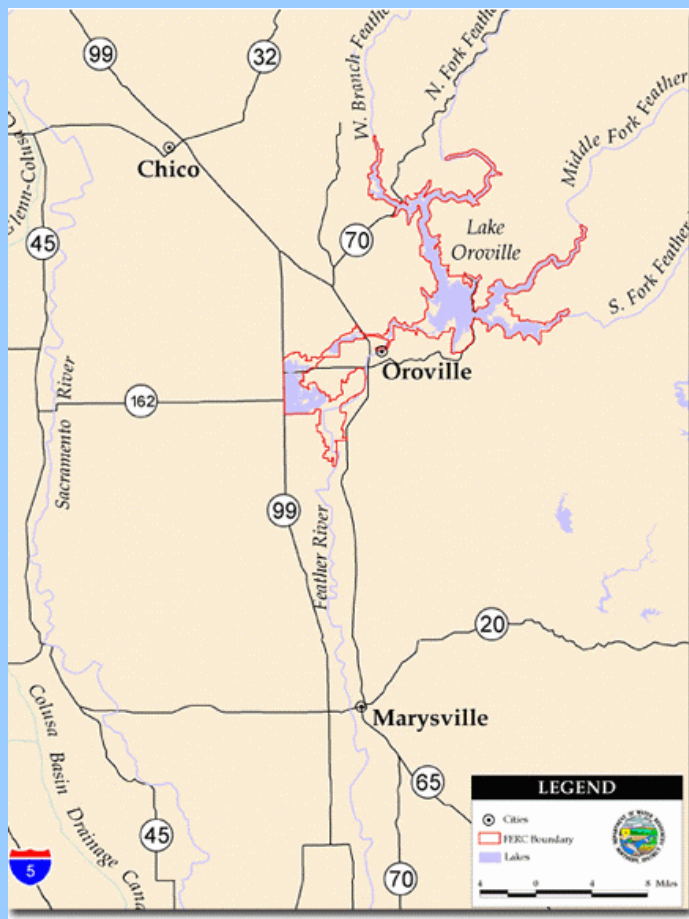
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## Oroville Facilities Relicensing

### Study E4: Flood Management-changes since 11/16/01

#### Study Area No change

FERC Project 2100 Boundary and the Feather River upstream of the Oroville dam that forms Oroville Reservoir Watershed, and downstream to confluence with the Yuba River.



Map of Study Area (Placeholder for more accurate Map)



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## **Oroville Facilities Relicensing**

### **Study E4: Flood Management-changes since 11/16/01**

#### **General Approach**

**Additional potential approaches for flood management:**

- **Modification of Operation rules and Storage amounts**
- **Forecast Based Operation-Basin condition, inflow and weather.**
- **Land Use Zoning**
- **Modification of Current notification procedure.**



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## **Oroville Facilities Relicensing**

### **Study E4: Flood Management-changes since 11/16/01**

#### **Detailed Methododology and Analysis Procedure**

##### **Task 1: Review existing or in-progress literature**

- **Add: Review Emergency Action Plan (EAP)**
- **Changes as a result of analysis in the relicensing process.**



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## **Oroville Facilities Relicensing**

### **Study E4: Flood Management-changes since 11/16/01**

#### **Task 2: Update/Refine Studies**

- **Make Flood Inundation Maps (100 -year) of the Feather River update conditional- if required by changes resulting from relicensing program.**
- **Move here: Forecast Based Reservoir Operation from Task 3**

#### **Task 3: Conduct Studies**

- **Delete Evaluation of Effect of Changes in Channel Geometry on the flow capacity downstream of Oroville Dam.**
- **Move Forecast Based Reservoir Operation to Task 2-Update.**
- **Move Update of Flood Operations Manual by USACE to Task 4.**
- **Delete Task 3. Renumber Task 4 as Task 3.**



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## Oroville Facilities Relicensing

### *Study E4: Flood Management-changes since 11/16/01*

#### **Task 4: Coordinate and Cooperate with on going studies by other agencies**

- **Renumber Old Task 4 to new Task 3.**
- **Add: Sutter Basin Feasibility Study**
- **Move Update of Flood Operation Manual by USACE from previous Task to this Task.**



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## Oroville Facilities Relicensing

### *Study E4: Flood Management-changes since 11/16/01*

**Results: Minor Changes, mostly editorial.**

**Products/Deliverables: Minor changes.**



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## Oroville Facilities Relicensing

### *Study E4: Flood Management-changes since 11/16/01*

#### **Coordination with Other Resource Areas/Studies**

##### **Reflect definite linkage with:**

- Environmental Work Group.
- Cultural Resources Work Group.
- Recreation and Socioeconomic Work Group.
- Land Use, Land Management and Aesthetics Work Group.

##### **Agencies with related activities:**

- Add US Geological Survey
- Add US Fish and Wildlife Service and National marine Fisheries Service



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## **Oroville Facilities Relicensing**

**Study Plan No. E3**

# **Additional Hydropower Generation**

**Changes since Nov. 16, 2001**



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## Oroville Facilities Relicensing

### *Study E3: Additional Hydropower Generation* *-changes since 11/16/01*

### Detailed Methodology and Analysis Procedure

### Task 3: Conduct New Studies

**Delete: Alternative Operation of the Oroville Facilities**

Maximize Hydropower Generation

Already being done